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SAP Global c/o Cooley Godward Kronish LLP				
William S. Galliani				
777 6th Street NW, Suite 1100				
Washington, DC 20001				
EXAMINER				
BASEHOAR, ADAM L				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/665,888

Applicant(s)

CONNAUGHTON, CHRIS

Examiner

ADAM L. BASEHOAR

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 61-64 and 66-70 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 61-64 and 66-70 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/C)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to communications: The RCE filed 01/16/09.
2. Claims 61-64 and 66-70 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Baisley (US 6502112, filed Aug 27, 1999), in view of Aoyama et al (US 6098071, filed Jun 7, 1999), and further in view of Ball et al. (US 6,366,933, filed Oct. 27, 1995).
3. Claims 61-64 and 66-70 are pending. Claim 1 is an independent claim.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 61-64 and 66-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baisley (US 6502112, filed Aug 27, 1999), in view of Aoyama et al (US 6098071, filed Jun 7, 1999), and further in view of Ball et al. (US 6,366,933, filed Oct. 27, 1995).

Regarding claim 61, Baisley teaches parsing the first and second documents into a first and second plurality of groups of characters delineated by block level markup language tags (i.e. block elements)(column 4, lines 9-11 & 48-50) and executing a routine to match groups in the first plurality of groups with corresponding groups in the second plurality of groups, and to identify differences between said groups in the first plurality of groups and matching groups in the second plurality of groups (column 3, lines 46-65). For example, Baisley discloses a method for comparing XML documents for identical contents, where a first XML document is parsed to

create a graph of its objects where each object is assigned a unique identification and a second XML document is parsed by a parser to create a graph of its objects where each object is assigned a unique ID. The compare module then compares the document graphs and provides an output signifying that the documents are equal or unequal (column 4, lines 46-63). The two documents are compared to see if they are semantically identical, that is, there is a one to one correspondence between the objects in the two documents (column 5, lines 10-17). Baisley also teaches normalizing the first and second normalized documents to facilitate rendering of a comparison document (column 5, lines 30-67; column 6, lines 1-65; column 7, lines 30-35: "semantic graph of interrelated objects of both documents is created...same specified format which the compare module can process").

Baisley does not specifically teach, but Aoyama teaches wherein the first and second normalized documents were coded in markup (column 3, lines 62-64; column 4, lines 35-38; column 6, lines 38-43: "structure document parsing program...converting each...document...into a tree") and were created by applying a rules-based multi-scan normalization to the first and second documents that preserved the visual formatting of the two documents (column 7, lines 18-45: "structured documents are analyzed by the structured document parsing program...elements allocated to each node of the document tree...according to rules...allocate the character strings sandwiched between a start tag and an end tag to a child node of the start tag"; column 13, lines 57-67; column 14, lines 1-20)(e.g. Figs. 17B, 22: 507, 24a-b, 25, 27). Baisley also does not teach, but Aoyama teaches composing a difference document comprising a third plurality of groups that include identified differences, and including elements that identify the differences; and generating a comparison document using a computer

while preserving visual formatting of one of the first and second documents, with visual features denoting the identified differences (Summary; column 7, lines 45-62; column 13, lines 57-67; column 14, lines 1-20)(Fig. 22). For example, Aoyama discloses a method for structured document difference string extraction, where after storing the difference data of comparing structured documents, the difference data is output in SGML form and displayed using an editor or viewer, such as a window displaying the difference data in structured form and defining the altered part by a solid line or otherwise discriminating the altered part by altering the color or type of the mark representing the structure by a solid line. These discriminated displays may be highlighted (column 13, lines 57-67; column 14, lines 1-20)(e.g. Figs. 17B, 22: 507, 24a-b, 25, 27). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Baisley to include the above teachings of Aoyama, because Aoyama taught that a rules based multi-scan normalization of structured markup documents and generating/displaying a comparison document of said structured documents providing the benefit of better extracting the relevant differences between structured documents by taking the logical meaning and structure of the structured documents into consideration (Abstract)(column 14, lines 26-48: "editor can grasp the difference suitable for the particular logical structure, thereby improving efficiency of editing a structure document").

Baisley nor Aoyama specifically teach a "line-by-line comparison" as both teach an object/node by object/node comparison of normalized documents. To the extent that said comparisons are not "line-by-line", Ball teaches a method of tracking and viewing changes of documents on the Web (Abstract; column 1 lines 50-57; column 11, lines 24-28; column 17, lines 23-28; column 19, lines 10-67; column 22, lines 22-29)(Fig. 11). Ball also teaches an

embodiment utilizing an algorithm for differential file comparison (column 17, lines 24-65), whereby a token is a textual line/sentence and can be compared (column 17 lines 65-67; column 18, lines 1-56). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the above teaches of Ball to Baisley, providing Baisley with a more accurate algorithm for comparison analysis (i.e. specifically for handling HTML documents) which would have allowed Baisley to create a single HTML page that summarizes all the common, new, and old material incorporated within the two compared normalized documents thus providing the advantage that the common material is displayed only once (column 19, 11-20: “advantage that the common material is displayed just once”).

Regarding claims 62, 63 and 64, Baisley teaches tags (Baisley at least column 5-6 tables I and II). Although Baisley teaches XML, Baisley does not specifically teach HTML. However, Ball teaches HTML (typically comprising text, links, and formatting elements (Ball at least column 17). It would have been obvious to one of ordinary skill in the art at the time of the invention to apply Ball to Baisley, providing Baisley the benefit of a widely popular format.

Regarding claims 66, 67 and 68, Baisley suggests a form of normalizing by removing characters ignored during rendering and characters that define format information not relevant to said matching. For example, Baisley discloses standardizing all XML documents to a common standard semantic graph based format that the comparison algorithm is capable of processing for comparing a semantic graph encoded in documents rather than comparing textual content and comparing documents that ignores differences in internal differences (column 3, lines 5-20). It is

noted that since characters are being removed, a character by character analysis is performed, and a set of rules to conduct said analysis is adhered to (column 6, lines 60-65: "sorting is done...bring the two documents to a common reference structure for comparing them").

As disclosed above, Baisley does not specifically teach applying a rules-based multi-scan normalization to the first and second documents that preserved the visual formatting of the two documents. Aoyama teaches applying a rules-based multi-scan normalization to the first and second documents that preserved the visual formatting of the two documents (column 7, lines 18-45: "structured documents are analyzed by the structured document parsing program...elements allocated to each node of the document tree...according to rules...allocate the character strings sandwiched between a start tag and an end tag to a child node of the start tag"). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Baisley with Aoyama for the same rationale listed above.

Regarding claims 69, 70, Baisley does not specifically teach a "*line-by-line comparison*" or a comparison document comprising all of the original content from the first document that remained unchanged. Ball teaches a method of tracking and viewing changes of documents on the Web (Abstract; column 1 lines 50-57; column 11, lines 24-28; column 17, lines 23-28; column 19, lines 10-67; column 22, lines 22-29)(Fig. 11). Ball also teaches an embodiment utilizing an algorithm for differential file comparison (column 17, lines 24-65), whereby a token is a textual line/sentence and can be compared (column 17 lines 65-67; column 18, lines 1-56) as well as teaching a merged comparison document that comprises all the original content from the first document that remained unchanged in the second document (column 19, lines 11-61). It

would have been obvious to one of ordinary skill in the art at the time of the invention to apply the above teaches of Ball to Baisley, providing Baisley with a more accurate algorithm for comparison analysis (i.e. specifically for handling HTML documents) which would have allowed Baisley to create a single HTML page that summarizes all the common, new, and old material incorporated within the two compared normalized documents thus providing the advantage that the common material is displayed only once (column 19, 11-20: "advantage that the common material is displayed just once").

Response to Arguments

6. Applicant's arguments filed 01/16/09 have been fully and carefully considered but they are not persuasive.

-In regard to independent claim 61, Applicant argues that neither of the cited references teach or suggest the newly added limitations, "apply a rules-based, multi-scan normalization to the first and second documents" and "maintaining the visual formatting of the first and second documents." The Examiner respectfully disagrees. As shown above, the Aoyama reference teaches wherein the first and second normalized documents were coded in markup (column 3, lines 62-64; column 4, lines 35-38; column 6, lines 38-43: "structure document parsing program...converting each...document...into a tree") and were created by applying a rules-based multi-scan normalization to the first and second documents that preserved the visual formatting of the two documents (column 7, lines 18-45: "structured documents are analyzed by the structured document parsing program...elements allocated to each node of the document tree...according to rules...allocate the character strings sandwiched between a start tag and an

end tag to a child node of the start tag"; column 13, lines 57-67; column 14, lines 1-20)(e.g. Figs. 17B, 22: 507, 24a-b, 25, 27). Wherein the scanning rules defined in the Aoyama reference appear different to those recited in Applicant's specification, the Examiner notes that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The Examiner suggests that a plurality of the rules that make up the claimed "rules-based, multi-scan normalization" be incorporated into the claim language to further distinguished the claimed invention over the applied prior art.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Please note the additionally cited references on the accompanying PTO-892.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM L. BASEHOAR whose telephone number is (571)272-4121. The examiner can normally be reached on M-F: 8:00am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Adam L Basehoar/
Primary Examiner, Art Unit 2178